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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,179

04/04/2005

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Q86608

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EXAMINER

MRUK, BRIAN P

ART UNIT

PAPER NUMBER

1751

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/530,179	<b>Applicant(s)</b> ITO ET AL.	
	<b>Examiner</b> Brian P. Mruk	<b>Art Unit</b> 1751	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/3/06, 7/8/05 &amp; 4/4/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4-5 and 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Instant claims 4-5 and 8-13 are rejected under 35 U.S.C. 112, second paragraph, for containing the phrase "consisting of an aqueous solution which comprises". This phrase renders the claim vague and indefinite, since it is unclear if the detergent composition is open or closed to additional components. Specifically, the inclusion of two transitional phrases (i.e. both "consisting" and "comprising") renders the claim vague and indefinite. The examiner suggests that applicant should amend claims 4-5 and 8-13 to contain one transitional phrase. Appropriate correction and/or clarification is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-13 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Villard et al, WO 01/97772.

Villard et al, WO 01/97772 (equivalent of Villard et al, US 2004/0028637), discloses a thickener for use in cosmetic detergents comprising 5-95 molar percent of a monomer performing a weak acid function, and 5-95 molar percent of at least one monomer performing a strong acid function (see abstract and page 3, lines 25-32). It is further taught by Villard et al that suitable strong acid monomers include 2-acrylamido-2-methyl propane sulfonic acid, and that suitable weak acid monomers include acrylic acid (see page 7, line 25-page 8, line 13), per the requirements of the instant invention. Specifically, note Polymers P1-P6 on page 9, and Examples 1-6, which contain polymers of 2-acrylamido-2-methyl propane sulfonic acid and acrylic acid, citric acid,

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and adjunct ingredients. Although Villard et al is silent with respect to the molecular weight of their polymers, the examiner asserts that the polymers disclosed in Examples P1-P6 of Villard et al would inherently meet the molecular weight requirements of the instant invention, since the polymers disclosed in Examples P1-P6 of Villard et al contain all of the required monomer units in the amounts required in the instant claims, absent a showing otherwise. Therefore, instant claims 1-13 are anticipated by Villard et al, WO 01/97772.

In the alternative that the above disclosure is insufficient to anticipate the above listed claims, it would have nonetheless been obvious to the skilled artisan to produce the claimed composition, as the reference teaches each of the claimed ingredients within the claimed proportions for the same utility.

8. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melby et al, U.S. Patent No. 6,066,315.

Melby et al, U.S. Patent No. 6,066,315, discloses an ampholyte polymer for use in personal care detergents comprising 20-95 mole percent of MAPTAC or APTAC, 5-80 mole percent of 2-acrylamido-2-methyl propane sulfonic acid (i.e. AMPSA) and acrylic acid, an up to 20 mole percent of an acrylate monomer, wherein the polymer has a molecular weight of 10 million (see abstract and col. 4, line 60-col. 5, line 17). It is further taught by Melby et al that the ampholyte polymer is present in the detergent composition in an amount of 0.01-20% (see col. 5, lines 11-16), and that the composition additionally contains citric acid (see col. 11, Shampoo Example #1), per the

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requirements of the instant invention. Specifically, note Examples 1-30. Although Melby et al generally discloses an ampholyte polymer that contains 5-80 mole percent of 2-acrylamido-2-methyl propane sulfonic acid and acrylic acid, the reference does not require such a composition containing this ampholyte polymer with sufficient specificity to constitute anticipation.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to have formulated a detergent composition, as taught by Melby et al, which contained an ampholyte polymer comprising 5-80 mole percent of 2-acrylamido-2-methyl propane sulfonic acid and acrylic acid, because such detergent compositions fall within the scope of those taught by Melby et al. Therefore, one of ordinary skill in the art would have had a reasonable expectation of success, because such a detergent composition containing an ampholyte polymer comprising 5-80 mole percent of 2-acrylamido-2-methyl propane sulfonic acid and acrylic acid is expressly suggested by the Melby et al disclosure and therefore is an obvious formulation.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Mruk whose telephone number is (571) 272-1321. The examiner can normally be reached on Mon-Thurs (7:00AM-5:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BPM

Brian P Mruk  
September 26, 2007

*Brian P. Mruk*

Brian P Mruk  
Primary Examiner  
Art Unit 1751